DISPLAYBOARDS

TIME PUTS ON A SHOW

A display of functionality: this is what Microgate displayboards offer.

The modular **MICROTAB** and **MICROGRAPH** displayboards have been designed and created to offer the right solution for every need. Their modular system makes it possible to quickly reach the desired size and being light and easy to handle, they are simple to transport.

MICROGATE
TIMING AND SPORT

MICROGRAPH

Image power

The modular graphic **MICROGRAPH** displayboard is the ideal choice for every type of visualization.
It can be used as a "stand-alone", but what really makes it special is the possibility of connecting different displayboards together to form a single displayboard of the size required, one which has multiple potentialities and at the same time is still extremely easy to transport.
MICROGRAPH's simple sturdy structure allows rapid and secure connection of the different displayboards.

Graphic display on two lines.

Graphic display on three lines.

The **MICROGRAPH** displayboards allow the use of different types of font, from a minimum height of 11 cm to a maximum 36 cm. Consequently it is possible to display up to 3 lines of 15 characters on a single module. Each module (135 x 36 x 16 cm) is composed of a matrix of 90x24 pixels, thus guaranteeing a very large display surface.

If connected to the Microgate stopwatches or a PC, the **MICROGRAPH** displayboards make it possible to display:
- names (competitors, horses, boats, etc.);
- nationalities;
- times;
- speeds;
- penalties and points;
- atmospheric data;
- time and date;
- monochromatic bitmap images.

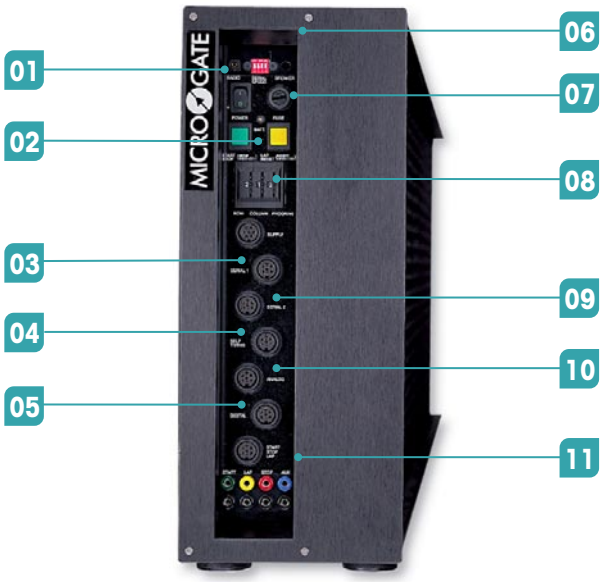
It is also possible to store fixed or rolling messages and strings, and then to display them automatically whenever desired.

The graphic matrix makes visualization possibilities almost unlimited. High-speed serial communication (RS 232/485 up to 115,200 BPS) makes it possible to manage up to 16 dynamic objects at the same time even at considerable distances.

The displayboards are supplied equipped with 10 different function programs that can be directly selected by the user, thus allowing great flexibility of use (see programs table).
For example, the accurate internal clock makes it possible to display the time of day and to measure times and speeds without the assistance of a stopwatch.

P 3 N 7 1:06.50
Pichler DEU
1 5 1:04.97 Lambert P. USA
2 3 1:06.07 Gasser An. AUT
3 7 1:06.50 Pichler L. DEU
4 2 1:07.53 Dalloz St. FRA
5 4 1:07.62 Gruber Pa. SUI
6 1 1:07.65 Andrighet. ITA

MICROGRAPH displayboard in six-module multiple configuration with fonts of different sizes.



01 Radio input (LINKGATE)
02 Start/stop and lap buttons for manual operation and for direct setting of parameters for the different programs
03 RS 232/485 serial input/output for connection to stopwatches (Microgate or others), PC or printers
04 Connection for management of self-timing systems
05 Digital I/O digital inputs/outputs (e.g. for signal light command)
06 Recessed control panel to protect inputs against knocks
07 Switch for serial line speed selection
08 Selectors for selection of function programs and line and column address
09 RS232/485 serial output for modular connection
10 Analogue inputs socket for connection of temperature sensors or other analogue data
11 Jack plugs and Start/Stop/Lap/Aux inputs socket

The possibility of connection to the Microgate LinkGate radio transmission system makes it possible to:

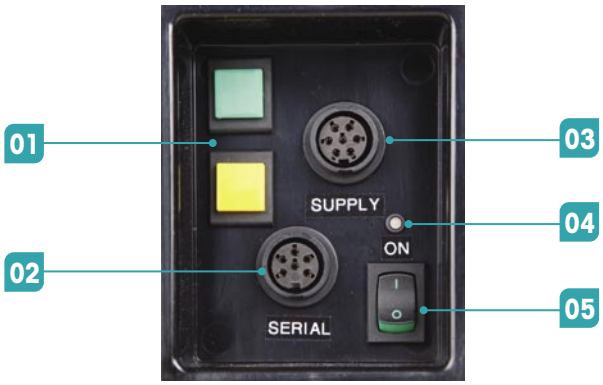
- receive via radio the timing impulses from EncRadio and the Polifemo photocells;
- display, without using cables, the information coming from the REI2, RaceTime2, and Fotofinish stopwatches and from PC.

MICROGRAPH displayboards are compatible with most timing systems currently on the market.
By connecting directly to the Microgate internet site, the user can update the firmware installed in the displayboards.

DATA	MICROGRAPH
Weight	30 kg, including batteries
Dimensions	135 x 36 x 16 cm
Chassis	In particularly light strong aluminium
Display	Graphic matrix of 90x24 pixels
Visibility	75 m
Operating temperature	-30°C / +70°C
Autonomy	30 hours

MICROGRAPH LIGHT

For those who are looking for a good-sized single displayboard (135x36 cm) with graphic possibilities, the solution is the new **MICROGRAPH LIGHT** displayboard. Based on a graphic matrix of 90x24 pixels, it offers various visualization possibilities and allows the use of different types of font: from 11 to 36 cm high. Consequently it is possible to display up to 3 lines of 15 characters on a single module.



01 Configuration and control buttons
02 RS 232/485 serial input/output for connection to stopwatches (Microgate or others), PC or printers
03 External power supply and battery recharge
04 LED indicator for battery status
05 On/Off button

MICROGRAPH LIGHT is available in 2 versions:
- with rechargeable built-in batteries;
- with mains power supply (without built-in batteries).

If connected to the Microgate stopwatches or a PC, the **MICROGRAPH LIGHT** displayboards make it possible to display:
- names (competitors, horses, boats, etc.);
- nationalities;
- times;
- speeds;
- penalties and points;
- time and date;
- monochromatic bitmap images
- fixed or rolling strings

The **MICROGRAPH LIGHT** displayboards can be commanded via cable or radio using the Microgate LinkGate system.
By connecting directly to the Microgate internet site, the user can update the firmware installed in the displayboards.

DATA	MICROGRAPH LIGHT
Weight	30 kg, including batteries
Dimensions	135 x 36 x 15 cm
Chassis	In particularly light strong aluminium
Display	Graphic matrix of 90x24 pixels
Visibility	75 m
Operating temperature	-30°C / +70°C
Autonomy	> 30 hours

MICROTAB

Time puts on a show

The alphanumeric **MICROTAB** displayboards are modular and, as well as being used individually, can be easily connected together to allow more complex visualizations.
The lightness of the displayboards and the compactness of the chassis make them very easy to transport and install.

Standard visualization

Bib + time visualization with alternative font.

If connected to the Microgate stopwatches or a PC, the **MICROTAB** displayboards make it possible to display:

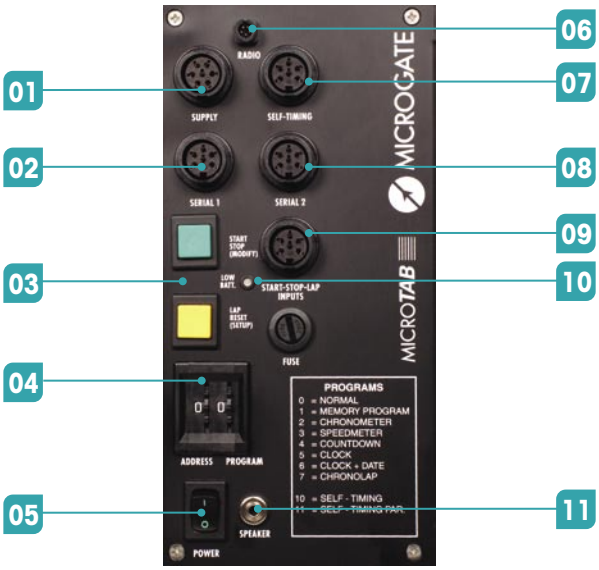
- names (competitors, horses, boats, etc.);
- nationalities;
- times;
- speeds;
- penalties and points;
- time and date;
- fixed or rolling strings.

It is also possible to store fixed or rolling messages and strings, and then to display them automatically whenever desired.

Using the Microgate LinkGate radio system it is possible to:

- receive timing impulses via radio;
- display, without using cables, the information coming from the REI2 and RaceTime2 stopwatches and from PC.

MICROTAB displayboard in four-module multiple configuration



01 External power supply and battery recharge
02 RS 232 and RS 485 serial input/output for connection to stopwatches (Microgate or others), PC or printers
03 Start/Stop and Lap buttons for manual operation and for directly setting parameters for the different programs
04 Selectors for selection of function programs and line and column address
05 On/Off button
06 Connection for reception of signals via radio (LinkGate system)
07 Connection for management of self-timing systems
08 RS 232 serial output for modular connection
09 Start/Stop and Lap inputs
10 LED indicator for battery status
11 Loudspeaker countdown output

The displayboards are supplied equipped with 10 different function programs that can be directly selected by the user, thus allowing great flexibility of use (see programs table).

The user can thus set the functioning of the displayboard to meet his/her specific requirements. The accurate internal clock makes it possible to display the time of day and to measure times and speeds without the assistance of a stopwatch.

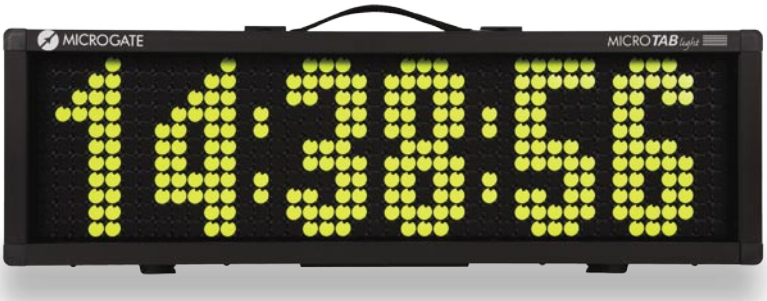
By connecting directly to the Microgate internet site, the user can update the firmware installed in the displayboards.

DATA	SINGLE MICROTAB
Weight	7.5 kg, including batteries
Dimensions	87 x 21 x 10 cm
Chassis	In particularly light strong aluminium
Display	Graphic matrix of 56x11 pixels
Visibility	75 m
Operating temperature	-30°C / +70°C
Autonomy	> 30 hours
	QUADRUPLE MICROTAB
Modular system	Possibility of obtaining a display of 16 lines of 81 characters each

MICROTAB LIGHT

The new numerical 6-character **MICROTAB LIGHT** displayboard is easy to transport (dimensions 75x22x15cm), light (weight 6.5 kg) and easy to use.
The displayboard is equipped with three different function programs:

- time display using a connection to a stopwatch (Microgate or others);
- as an autonomous stopwatch, particularly recommended for marathons;
- for displaying time of day.



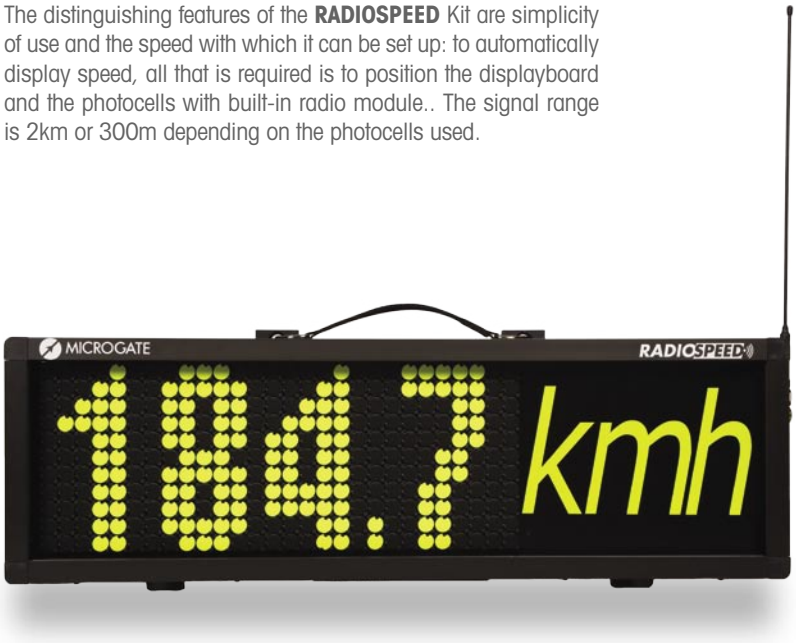
01 Buttons Start/Stop and Lap for manual operation and to directly set the parameters for the different programs
02 LED indicator for battery status
03 Input Start/Stop and Lap
04 Input/Output RS 232 and RS 485 serial for connection to stopwatches (Microgate or others), PC or printers
05 External power supply and battery recharge

DATA	MICROTAB LIGHT
Weight	6.5 kg, including batteries
Dimensions	72 x 22 x 15 cm
Chassis	In particularly light strong aluminium
Display	Graphic matrix of 42x11 pixels
Visibility	75 m
Operating temperature	-30°C / +70°C
Autonomy	> 30 hours

RADIOSPEED

In many sectors of sport, such as motor racing or skiing, there is an ever greater demand for systems for taking and displaying speed. Taking speed does not have only specifically sporting objectives but involves different aspects such as safety on ski slopes or motor car tests. To satisfy this increasing market demand, Microgate has conceived a radio system for taking and displaying speed.
RADIOSPEED is completely automatic: it does not require the use of cables or the presence of an operator.

The distinguishing features of the **RADIOSPEED** Kit are simplicity of use and the speed with which it can be set up: to automatically display speed, all that is required is to position the displayboard and the photocells with built-in radio module.. The signal range is 2km or 300m depending on the photocells used.



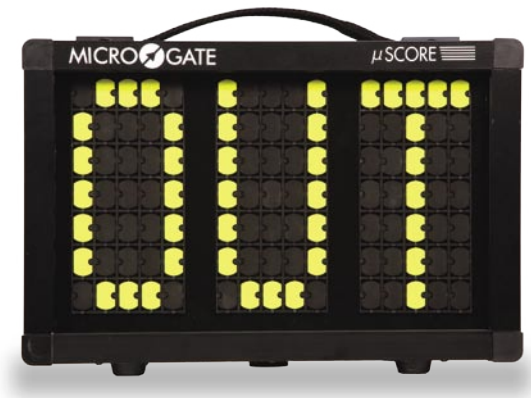
MICROSCORE

The 3-figure displayboard **MICROSCORE** is used as a lap counter, a points indicator, a concentration-clock/countdown for athletics competitions and as a wind speed display if connected to an anemometer.

The displayboard comes with a command keyboard that makes it possible to:
- increase or decrease the number of laps (in lap counter function);
- to activate/block the countdown and then restart it;
- to increase or decrease the scores displayed.

Thanks to its NiMh rechargeable batteries, the **MICROSCORE** displayboards can function autonomously for over 60 hours.

DIMENSIONS
width: 330 mm
height: 220 mm
depth: 150 mm
weight: 4 kg

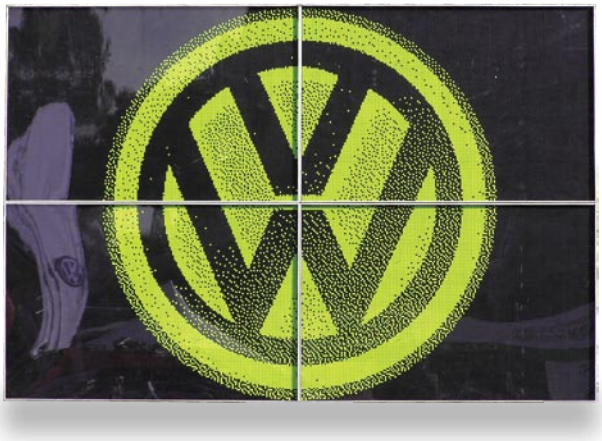


ROTATING DISPLAYBOARDS

The **rotating displayboards** use Microgate's motorized supports that guarantee optimal rotation speed combined with smooth functioning and absence of vibrations.
Using the serial connection, it is possible to set starting and stopping of movement, the extent in degrees of rotation, the stopping point and the number of rotations to make.

CUSTOMIZED DISPLAYBOARDS

Microgate designs and makes large-sized displayboards, either fixed or on a rotating support.
It has made displayboards on a rotating support of up to 3.10 x 2.20 metres and foldable displayboards, mounted on wheels, of over 10 metres fitted with hydraulic positioning systems.



DOUBLE-FACE DISPLAYBOARDS

All the Microgate displayboards are also available in double-face format.
The creation of a special frame makes it possible to have double-face displayboards of a thickness not much greater than that of a normal displayboard, while guaranteeing maximum solidity of the whole.
The lightness of the double-face displayboards means they can be mounted on the roof of a normal motor vehicle ensuring optimal visibility.
The MicroGraph/MicroTab double-face displayboards can be managed via cable or via radio, using the Microgate LinkGate system.

NOT ONLY HARDWARE...

MicroTab and MicroGraph

Various programs that can be selected by using a switch on the displayboards, ensure the great versatility of the MicroTab and MicroGraph displayboards:

- **Normal program:** for the use of displayboards connected to a Microgate stopwatch, a PC or the timing equipment of other producers.
- **Display program:** to store and automatically display a preselected sequence of fixed or rolling strings.
- **Timing program:** in this mode the displayboards function like a normal stopwatch with one thousandth of a second precision. It is also possible to set the stopwatch starting time.
- **Speed measurement program:** makes it possible to measure speed. All that is necessary is to place two photocells at the desired distance and connect them to the dedicated displayboard inputs. The system can manage up to 20 passages at a time at the measurement base. If the speed base is not crossed within a certain time, MicroTab and MicroGraph will automatically display the advertising messages you selected earlier!
- **Countdown program:** transforms MicroTab and MicroGraph into versatile timers for the start, including sound signal. At each start the start time and then the difference between this and the programmed time are displayed, with an accuracy to a thousandth of a second.
- **Time display program:** MicroTab and MicroGraph display the time of day.
- **Time and date program:** the time and date are shown alternately for 10 seconds each.
- **Lap timing program:** at every impulse taken the displayboards display the time from the previous impulse and automatically start again from zero.
- **Self-timing program:** combined with a token device, a photocell and a starting gate, MicroTab and MicroGraph become an automatic pay timing system. The displayboards display the race time and, as an option, the exit speed.
- **Parallel self-timing program:** with the assistance of just one Microgate token device at the start and a single alphanumeric or graphic displayboard at the finish, it is possible to create a self-timing system for managing parallel slalom.

MODEL	MICROGRAPH	MICROGRAPH LIGHT	MICROTAB	MICROTAB LIGHT
Normal	✓	✓	✓	✓
Display of stored messages	✓*		✓*	
Timing	✓		✓	✓
Speed measurement	✓		✓	
Countdown	✓		✓	
Time	✓	✓*	✓	✓
Time and date	✓	✓*	✓	
Lap times	✓		✓	
Self-timing single	✓		✓	
Self-timing parallel	✓		✓	

*only with MicroBoards software